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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,838	06/10/2002	Motoki Kato	450101-03168	2206
7590 William S Frommer Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151			EXAMINER ZHAO, DAQUAN	
			ART UNIT 2621	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/018,838	Applicant(s) KATO ET AL.	
	Examiner Daquan Zhao	Art Unit 2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,24-28 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,24-28 and 30-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1, 2, 4-13, 24-28, 30-33 have been considered but are moot in view of the new ground(s) of rejection.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1,2,4-13,24-28,30-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 12, 13, 14, 15, 20, 21, 22, 23 of copending Application No. 11/787,368 (#368) and further in view of Ando et al (US 6,353,702). Although the conflicting claims are not identical, they are not patentably distinct from each other because

For claim 1 of the instant application, #368 teaches generating means for generating clipMark formed by a mark specifying a characteristic picture extracted from an input AV stream, as management information for supervising the AV stream, and for generating PlayListMark, formed by marks pointing to a picture optionally specified by a user, from a reproduction domain corresponding to a PlayList defining the combination of preset domains in said AV stream (see claims 1, 12, 13, 14, 15, 20, 21, 22 and 23 of #368); and

recording means for recording said ClipMark and PlayListMark as respective independent table with on a recording medium (see claims 1, 12, 13, 14, 15, 20, 21, 22 and 23 of #368).

However #368 fails to teach a predetermined format and wherein the PlayList comprises a plurality of playback domains represented by a pair of an In-point and an OUT-point on a time axis, and wherein the mark stored in the ClipMark of the Clip referenced by the PlayList is capable of being a reference when the PlayList is reproduced. Ando et al teach a predetermined format (the user defined PGC information table and play list search pointer table, which have different format are two independent table stored in the RTR.IFO shown in figure 8 and figure 23) and the PlayList comprises a plurality of playback domains represented by a pair of an In-point and an OUT-point on a time axis (e.g. figure 7A, and column 11, lines 30-40, for example PGC#2, which is considered to be the "playlist" playback cellA->CellE->cellF and all these cells in the PGC are considered to be the playback domains, wherein the start and end of a cell is considered to be the in-point and out-point, for example, figure

7A, "start of presentation of Cell A" and "end of presentation of cell A"), and wherein the mark stored in the ClipMark of the Clip referenced by the PlayList is capable of being a reference when the PlayList is reproduced (e.g. the cells are referenced by the PGC because the PGC defines what cell to be playback. See column 11, lines 30-40 and figure 7). It would have been obvious to one ordinary skill in the art at the time the invention was made to have incorporated the teaching of Ando et al into the teaching of #368 for fast data editing and fast data reproduction.

Claims 12, 13, 25, 27, 28 and 30 of the instant application are rejected for the same reasons as claim 1 of the instant application above.

Claim 4 of the instant application is the same as claim 4 of #368.

Claim 5 of the instant application is the same as claim 5 of #368.

Claim 6 of the instant application is the same as claim 6 of #368.

Claim 7 of the instant application is the same as claim 7 of #368.

Claim 26 of the instant application is the same as claim 16 of #368.

Claim 24 of the instant application is the same as claim 3 of #368.

Claim 2 of the instant application is the same as claim 2 of #368.

Claims 8,9, 10, 11,31,32, 33 of the instant application are the same as claim 8, 9, 10, 11,17,18,19 of #368, respectively.

4. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 2 recites the limitation "ClipInformaiton file" and "PlayList File" in claim 1.

There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13, 28 and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There's no support in the specification for "computer-readable medium."

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Nonfunctional descriptive material that does not constitute a statutory process, machine, manufacture or composition of matter and should be rejected under 35 U.S.C. Sec. 101. Certain types of descriptive material, such as music, literature, art, photographs, and mere arrangements or compilations of facts or data, without any functional interrelationship is not a process, machine, manufacture or composition of matter. USPTO personnel should be prudent in applying the foregoing guidance. Nonfunctional descriptive material may be claimed in combination with other functional descriptive multi-media material on a computer-readable medium to provide the necessary functional and structural interrelationship to satisfy the requirements of 35 U.S.C. Sec. 101. The presence of the claimed nonfunctional descriptive material is not necessarily determinative of nonstatutory subject matter. For example, a computer that recognizes a particular grouping of musical notes read from memory and upon recognizing that particular sequence, causes another defined series of notes to be played, defines a functional interrelationship among that data and the computing processes performed when utilizing that data, and as such is statutory because it implements a statutory process.

6. Claims 13, 28 and 30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claim 13 recites a computer-readable medium for storing program code which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim 28 recites a computer-readable medium "**adapted to**" store a computer program which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not

constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

Claim 30 recites a computer-readable "adapted to" store an AV stream which does not impart functionality to a computer or computing device, and is thus considered nonfunctional descriptive material. Such nonfunctional descriptive material, in the absence of a functional interrelationship with a computer, does not constitute a statutory process, machine, manufacture or composition of matter and is thus non-statutory per se.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 4, 6, 12, 13, 25, 26, 27, 28, 30, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Ando et al (US 6,353,702 B1).

**In regards to claim 1**, Ando et al teach generating means for generating clipMark formed by a mark specifying a characteristic picture extracted from an input AV stream, as management information for supervising the AV stream (e.g. column 29,



lines 15-44, the "cell information search pointer" in the user defined PGC information table is considered to be the clipMark and the "still picture cell" is considered to be the clip, the cell information search pointer points to the start address of the "still picture cell", also see figure 35 for the structure of the PGC and the Cell), and for generating PlayListMark, formed by marks pointing to a picture optionally specified by a user, from a reproduction domain corresponding to a PlayList defining the combination of preset domains in said AV stream (e.g. figure 7, column 11, lines 30-40, and column 12, lines 1-22, the thumbnail pointer information in "play list search pointer table" is considered to be the PlayListMark because the thumbnail pointer points to thumbnail image specified by user, see column 5, lines 34-37. the PGC is considered to be the playlist because the playlist search pointer contains "PGC number information corresponding to this play list". figure 7 shows plurality of Cell. Each is considered to be "a reproduction domain" ); and

recording means for recording said ClipMark and PlayListMark as respective independent table with a predetermined format on a recording medium ( the user defined PGC information table and play list search pointer table are two independent table stored in the RTR.IFO shown in figure 8 and figure 23),

wherein the PlayList comprises a plurality of playback domains represented by a pair of an In-point and an OUT-point on a time axis (e.g. figure 7A, and column 11, lines 30-40, for example PGC#2, which is considered to be the "playlist" playback cellA->CellE->cellF and all these cells in the PGC are considered to be the playback domains, wherein the start and end of a cell is considered to be the in-point and out-

point, for example, figure 7A, "start of presentation of Cell A" and "end of presentation of cell A"), and

wherein the mark stored in the ClipMark of the Clip referenced by the PlayList is capable of being a reference when the PlayList is reproduced (e.g. the cells are referenced by the PGC because the PGC defines what cell to be playback. See column 11, lines 30-40 and figure 7).

**Claims 12, 13, 25, 27, 28 and 30** are rejected for the same reasons discussed in claim 1 above.

**For claim 4**, Ando et al teach in reproducing said playList, said mark forming the clipMark of said AV stream corresponding to the reproduction domain of said playList is referenced (e.g. the cells are referenced by the PGC because the PGC defines what cell to be playback. See column 11, lines 30-40 and figure 7. the start address of the cell in the medium has to be known by using the "cell information pointer").

**For claims 6, 31 and 32**, Ando et al teach the mark forming the clipMark or said mark forming the playListMark comprises the information specifying an entry point of an elementary stream (e.g. figure 24, Still Picture cell entry point included in the Still picture cell info, column 29, lines 39-57).

**For claim 26**, Ando et al teach presentation controlling means for managing control to cause a list by a thumbnail picture associated with said playListMark to be presented to a user (e.g. column 12, lines 13-22 and column 5, lines 34-37).

**For claim 2**, Ando et al teach generating means generates said clipMark and said playlistMark as a first syntax of a clipInformation file and as a second syntax of a

playlist file, respectively (e.g. the "play list search pointer table" corresponds to PlayList file, and the "user defined PGC information table" corresponds to the clipInformation file. The two tables have different data structure. Thus they have different syntax file.).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 7, 8, 9, 11, 24 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al (US 6,353,702 B1) as applied to claims 1, 2, 4, 6, 12, 13, 25, 26, 27, 28, 30, 31 and 32 above, and further in view of Kikuchi et al (US 6,580,872 B1).

See the teaching of Ando et al above.

For claim 5, Ando et al fail to specify mark of the playlistMark comprises presentation time stamp and the identification information for indicating one reproduction domain specified on said AV stream data forming the reproduction rout of said playList. Kikuchi et al teach mark of the playlistMark comprises presentation time stamp and the identification information for indicating one reproduction domain specified on said AV stream data forming the reproduction rout of said playList (e.g. column 18, lines 9-22, see figure 21-23, PTM corresponds to the presentation time stamp, cell number CN corresponds to the identification information and "resume" target cell

corresponds to the reproduction route of the playlist). It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kikuchi et al into the teaching of Ando et al for easy and flexible editing (Kikuchi et al, column 1, lines 40-43).

**For claim 7**, Kikuchi et al teach the mark of the playListMark comprises the information of the type at least including the Resume point of the start point of a favorite scene or a Resume point of the playList specified by a user (e.g. column 18, lines 9-22, resume target cell).

**For claims 11, 24 and 33**, Kikuchi et al teach mark of said cliMark comprises a scene change point, a commercial start point, a commercial end point of a title displaying scene (e.g. column 29, 19-31).

**For claim 8**, Kikuchi et al teach mark of the clipMark and mark of the playlistMark are represented by an address of a relative source packet corresponds to an entry point of said AV stream (e.g. column 8, lines 22-34 and lines 49-67).

**For claim 9**, Kikuchi et al teach mark of the clipMark and said mark of the playListmark are represented by a first address of a relative source packet corresponding to an entry point of said AV stream and by a second address of an offset from said first address, respectively (e.g. column 20, lines 54-60).

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al (US 6,353,702) as applied to claims **1, 2, 4, 6, 12, 13, 25, 26, 27, 28, 30, 31 and 32** above, and further in view of Kazui et al (US 5,642,174).

See the teaching of Ando et al above.

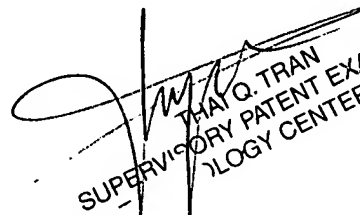
**Regarding claim 10**, Ando et al fail to teach type detection means for detecting the type of said characteristic picture. Kazui et al teach detection means for detecting the type of said characteristic picture (e.g. column 3, lines 27-44). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Kazui et al into the teaching of Ando et al to detecting a scene change accurately (Kazui et al, column 2, lines 24-28).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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